

Mysterious Friday the 13th Explosion Shreds Streets Kentucky Guard on Duty in “Old Louisville”

Compiled by Jason LeMay

Friday the 13th of February in 1981 was one that would become well remembered when an explosion ripped through two and a half miles of sewer lines up to 12 feet in diameter under Louisville streets and leaving trenches and craters throughout the area with some as deep as 35 feet. It took some two years to complete all the repairs and millions upon millions of dollars.

No serious injuries were reported but many homes and businesses were damaged and areas were evacuated. Water and sewer services were disrupted to hundreds of homes and businesses. The Kentucky Guard's military police was called in to provide support in the effected areas and patrolled evacuated areas and provided additional traffic control and security from the day of the explosion until the 25th February.



Kentucky National Guard Military Police and Jeep provide traffic control and security at this intersection in the damaged area of Louisville. Photo used with permission of the Louisville / Jefferson County Metropolitan Sewer District.

The Kentucky Guard's role in response to the emergency is an excellent example of a typical safety and security mission they are often called upon for in State Active Duty status across the state in times of emergency.

The Annual Unit History Report for the 223rd MPs for 1981 says that “on or about 19 February, 1981, the unit was activated for a five day period and provided traffic control and security to homes in the area which were evacuated.”

The Annual Unit History Report for the 438th MPs for 1981 says that they assisted the Louisville Division of Police in maintaining Law and Order in the “Sewer Damage Explosion Area” during the unit's regularly scheduled IDT period



One of many craters left by the explosion. Photo courtesy of CSM (R) Mike James

14-15 February and personnel from the unit remained on State Active Duty through 25 February 1981.

Mike James reports that HHD, 198th MP Bn was involved as a command and control element for the 223rd and 438th. The Unit History Report for KG-198th says that selected members were put on State Active Duty for the Sewer Explosion in Louisville on Friday, 13 February. Eight officers and four enlisted personnel performed duty with the line companies for one week.



At left KYNG MPs inspect the damage to a car parked along the street by a manhole assembly launched by the explosion from 1981 DMA Annual Report. At right a KYNG MP Jeep patrols courtesy Tom Spalding.



At left KYNG MP manning checkpoint and at right example of rubble left by the explosion. Courtesy Tom Spalding



KYNG MPs man a check point at an intersection courtesy Tom Spalding.

According to the Louisville / Jefferson County Metropolitan Sewer District:

Shortly after 5:15 a.m. on Friday, February 13, 1981, two women going to work at a hospital drove under the railroad overpass on Hill Street near 12th Street. There was a gigantic blast, and their car was hurled into the air and onto its side.

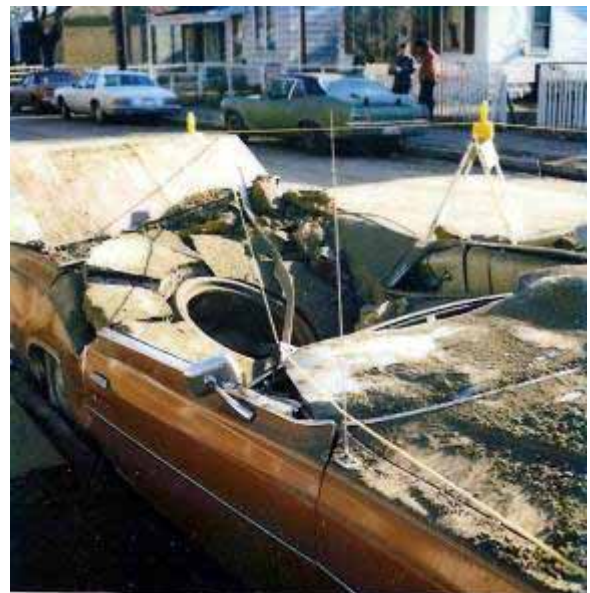
At the same time, a police helicopter was heading toward the downtown area when the officers saw an unforgettable sight: a series of explosions, "like a bombing run," erupting along the streets of Old Louisville and through the University of Louisville campus.

More than two miles of Louisville streets were pockmarked with craters where manholes had been. Several blocks of Hill Street had fallen into the collapsed, 12-foot-diameter sewer line. Miraculously, no one was hurt seriously, but homes and businesses were extensively damaged and some families had to be evacuated. Louisville was in the headlines and on broadcast news throughout the country for several days.

The cause of the explosion was traced to the Ralston-Purina soybean processing plant southeast of the university campus, where thousands of gallons of a highly flammable solvent, hexane, had spilled into the sewer lines. The fumes from the hexane created an explosive mixture, which lay in wait in the larger sewer lines. As the women drove under the overpass, a spark from their car apparently ignited the gases.



Above - Hill Street west of 11th Street. Below - manhole and pavement pound car. Courtesy CSM (R) Mike James. Similar image provided by the Louisville / Jefferson County Metropolitan Sewer District and courtesy of COLE Publishing, Inc.



Several blocks of Hill Street soon became an open trench, as crews cleared away the debris and prepared to replace the sewer line. The trench remained open throughout the summer while work continued. (The stench was so bad that the Louisville / Jefferson County Metropolitan Sewer District tried using huge blocks of restroom-type deodorant to try to mask the odor — without success.)

It took 20 months to repair the sewer lines, and another several months to finish the work on the streets.

Ralston-Purina pleaded guilty of four counts of violating federal environmental laws, and paid a fine of \$62,500. In February, 1984, the company agreed to pay Louisville / Jefferson County Metropolitan Sewer District more than \$18 million in damages. Many millions more were paid to other government agencies and private individuals who suffered damage.

As for the soybean plant: Ralston-Purina used more than \$2 million in city industrial bonds to rebuild it in 1983 — and then sold it in 1984.¹

The 1981 Annual Report of the Adjutant General of Kentucky does not add greatly to this story in terms of the scope of the Guard's state active duty mission. It does shed some light on the disaster response portion.



Photo used with permission of the Louisville / Jefferson County Metropolitan Sewer District and courtesy of COLE Publishing, Inc.

On Feb. 13, the early morning tranquility of Louisville's Hill Street area was disrupted by a violent explosion that ripped up sections of streets and left huge craters, some 35 feet deep. Improper handling of frozen pipes in the hexane system of the Ralston Purina Co. plant allegedly caused the leak of the chemical into the city's combined waste water and storm sewage system. Apparently, a passing automobile's catalytic converter sent a spark down a manhole cover, setting off the blast. The explosion affected a three-square mile area serviced by the Metropolitan Sewer District and caused an estimated \$30 million in damages to sewers, road and water lines and

additional damage to buildings. Service to an estimated 23,000 people was disrupted, while 1,828 of the customers in the immediate blast area were evacuated.

A Feb. 17 request from Gov. John Y. Brown Jr. for a Presidential Disaster Declaration was denied, but a March 12 appeal for aid brought the desired result. President Ronald Reagan declared Old Louisville on March 18 a disaster area. The Louisville incident was unique in three ways: because a third party might be liable for all costs, because the disaster was man-made and because it was the first time the 75/25 federal/state funding issue came up in Kentucky. Kentucky DES and other states have fought this change in disaster funding agreements from the previous 100 percent federally-funded situation of other presidentially-declared disasters.

The Louisville sewer disaster became the year's only Presidential Disaster Declaration. The explosion in Louisville's Hill Street area caused damages estimated at \$30 million to sewers, roads and water lines and additional damage to buildings.

Gov. John Y. Brown Jr. issued a request Feb. 17 for a Presidential Disaster Declaration for the neighborhood of Old Louisville, while Federal Emergency Management Agency officials from Atlanta surveyed the damaged area.

Included in the damage estimates were: 107 homes without water and sewer services; five businesses heavily damaged; two and a half miles of extensive damage to sewer lines, and one and a half miles of heavily-traveled main streets requiring total reconstruction.

Brown issued an appeal March 12 after the initial request for aid was turned down. DES officials worked closely with Brown on the appeal. In his appeal, Brown reemphasized his initial finding that the situation exceeded state and local capabilities to provide for adequate response and recovery. Brown's appeal stated that the City of Louisville and the Commonwealth of Kentucky did not have the funds available for relief of such an emergency. The appeal letter stressed the threat of gastro-intestinal disease to 23,000 residents in the affected area and the increasing threat warm weather would pose. Brown also expressed in the appeal letter his argument against rate increases by the Metropolitan Sewer District to absorb costs.



Backhoe beginning work on debris. Courtesy CSM (R) Mike James.

President Ronald Reagan granted a major disaster declaration March 18 "limited to emergency sewer and related street repair." The Disaster Field Office opened March 19 to handle public assistance claims. Negotiations began on the new 75/25 federal/state funding agreement, the first time Kentucky had to deal with this change from the previous 100 percent federal funding of presidential disaster declarations.

By the end of the month, an agreement had been struck between federal and state officials. The three-part agreement was signed on March 31 by the Governor. The first of the agreements between the state and federal government provided for the federal government to defray 75 percent of eligible costs of the reconstruction. The second agreement between the state and the Louisville Water Company committed the water

company to provide the non-federal share of the water line repairs. A third agreement--among the state, City of Louisville, Jefferson County and the Metropolitan Sewer District--provides financing for the balance of the reconstruction costs. During negotiations, DES did everything possible to avoid an immediate increase in sewer rates for Jefferson County residents.

The Louisville sewer disaster was unique in three ways: because a third party might be liable for all costs, because the disaster was - man-made and because it was the first time the 75/25 federal/state funding issue came up in Kentucky. The case of responsibility was still pending at the end of the fiscal year. DES continues to fight the 75/25 issue with the FEMA national office and Congress.

The Disaster Field Office in Louisville closed April 10, after four applications for public assistance had been made by the Louisville Water Company, the City of Louisville, MSD and the University of Louisville.



Large crater created by the explosion. Courtesy CSM (R) Mike James.

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¹ Louisville / Jefferson County Metropolitan Sewer District (MSD) History Louisville, Kentucky - <http://www.msdlouky.org/aboutmsd/history20.htm>